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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,382	03/19/2004	Gary Lee Sturgill II	SS3375USNA	7243

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WILMINGTON, DE 19805

EXAMINER
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BEFUMO, JENNA LEIGH

ART UNIT	PAPER NUMBER
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1771

MAIL DATE	DELIVERY MODE
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06/04/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/804,382

Applicant(s)

STURGILL, GARY LEE

Examiner

Jenna-Leigh Befumo

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1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 13-37 and 42-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 38-41 and 46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The Amendment submitted on March 7, 2007, has been entered. Claims 1 and 38 have been amended. Therefore, the pending claims are 1 – 46. Claims 13 – 37 and 42 – 45 are withdrawn from consideration as being drawn to a nonelected invention. It is noted that claims 32 – 37 are incorrectly labeled as original in the pending amendment. However, these claims have been withdrawn from consideration and should be properly labeled withdrawn in a subsequent listing of claims.

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Druecke et al. (6,139,675) in view of Rudisill et al. (5,885,909) for the reasons of record.

4. Claims 1 – 5, 7 – 9, 38 – 41 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Druecke et al. (6,139,675) in view of Rudisill et al. (5,885,909) and Kajander et al. (5,091,240).

The features of Druecke et al. and Rudisill et al. have been set forth in the previous Office Action. Druecke et al. discloses a method for bonding together a fabric composite comprising a spunbond web with a discontinuous water-based adhesive material. However, Druecke et al. fails to teach that the water-based adhesive is a non-crosslinkable adhesive with a curing temperature between 15 to 30°C. Kajander et al. is drawn to composite materials that use crosslinkable or non-crosslinkable water-based adhesive materials (column 1, lines 60 – 67). Kajander et al. discloses that the use of non-crosslinking water-based adhesives improves manufacturing, as uncured crosslinkable water-based adhesives can be more irritating to the skin than non-crosslinked water-based adhesives (column 2, lines 55 – 62). Also, Kajander et al. discloses that using non-crosslinking water-based adhesives simplifies the manufacturing process because the curing ovens are eliminated from the process (column 2, lines 60 – 65). Further, Kajander et al.

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discloses that the preferred non-crosslinking adhesive is a latex adhesive which dries under ambient conditions, i.e., room temperature, and provides sufficient integrity to the laminate for the laminate to be cut or processed while the before the adhesive has completely dried (column 3, lines 50 – 65). Thus, it would have been obvious to one having ordinary skill in the art to use a non-crosslinkable water-based adhesive, as taught by Kajander et al., as the water-based adhesive in Druecke et al. since Kajander et al. discloses that non-crosslinkable adhesives are less irritating to the skin than uncured crosslinkable adhesives, using non-crosslinkable adhesives simplifies a production process by removing the need for curing ovens, since the adhesive cures at ambient temperatures, and the non-crosslinked adhesive provides the composite with sufficient integrity to be processed before the adhesive completely dries. Therefore, claims 1 – 5, 7 – 9, and 38 – 41 are rejected.

5. Claim 6 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Druecke et al. and Rudisill et al. as applied to claim 1 above, and further in view of Pruett et al. (5,010,165) for the reasons of record.

6. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Austin et al. (5,415,925) in view of Crenshaw et al. (4,588,457) and Strack et al. (5,681,645) for the reasons of record.

7. Claims 1 – 5, 7 – 12, 38, 39, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Austin et al. (5,415,925) in view of Crenshaw et al. (4,588,457), Kajander et al. (5,091,240), and Strack et al. (5,681,645).

The features of Austin et al., Crenshaw et al., and Strack et al. have been set forth in the previous Office Action. Austin et al. discloses a fabric composite comprising spunbond and meltblown layers which are bonded together by an adhesive layer. Further, Austin et al. discloses that the adhesive should be tacky at room temperature (column 4, lines 50 – 60). However, Austin et al. fails to teach using a water-based adhesive as the adhesive layer.

Crenshaw et al. is drawn to composite fabrics comprising a spunbond layer adhesively bonded to another fibrous layer with a flexible soft adhesive (abstract). Further, Crenshaw et al. discloses that various latex adhesives (which is a water-based adhesive), including acrylic polymers and vinyl copolymers, are tacky at room temperature, remain flexible and soft as it dries, and can be used to bond spunbond fabrics to additional fibrous layers. Finally, Kajander et al. discloses that preferred non-crosslinkable vinyl acrylic adhesives dry at ambient temperature and provide sufficient integrity to be processed before the adhesive completely dries (column 3, lines 50 – 65). Thus, the adhesive is tacky at ambient temperatures, while it is drying, in order to provide integrity to the composite before it is completely dry and allow the composite to be processed. Further, Kajander et al. discloses that the use of non-crosslinking water-based adhesives improves manufacturing, as uncured crosslinkable water-based adhesives can be more irritating to the skin than non-crosslinked water-based adhesives (column 2, lines 55 – 62). Also, Kajander et al. discloses that using non-crosslinking water-based adhesives simplifies the manufacturing process because the curing ovens are eliminated from the process (column 2, lines 60 – 65). Thus, it would have been obvious to one having ordinary skill in the art to use water-based adhesive, as taught by Crenshaw et al. and Kajander et al., to bond together the fibrous layers of Austin et al., since Austin et al. desires a composite adhesively bonded which would be tacky at room temperature, and both Crenshaw and Kajander et al. disclose that water-based adhesives are tacky and maintain the integrity of the composite while the adhesive is still wet. Further, Crenshaw et al. discloses that water-based adhesives are soft and flexible after they dry producing a composite fabric which has better flexibility and is soft to the touch. Finally, Kajander et al. discloses that using a non-crosslinkable adhesive simplifies the production process by removing curing ovens and using materials which are less irritating to the skin. Therefore, claims 1 – 5, 7 – 12, 38, 39, and 46 are rejected.

***Response to Arguments***

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8. Applicant's arguments filed March 7, 2007 have been fully considered but they are not persuasive. The applicant argues that the rejection of claim 46, based on Druecke et al. and Rudisill et al., fails to teach non-crosslinkable water-based adhesives. However, the arguments are not commensurate in scope since claim 46 does not require a non-crosslinkable adhesive. Therefore, the rejection is maintained.

The applicant argues that the rejection of claim 46, based on Austin et al., Crenshaw et al., and Strack et al., fails to teach non-crosslinkable water-based adhesives. However, the arguments are not commensurate in scope since claim 46 does not require a non-crosslinkable adhesive. Therefore, the rejection is maintained.

With regards to the other pending claims, 1 – 12 and 38 – 41, the rejections for these claims have been modified as set forth above with Kajander et al., making the arguments moot.

#### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

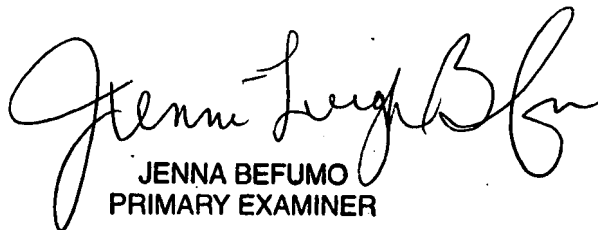
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jlb  
May 25, 2007

  
JENNA BEFUMO  
PRIMARY EXAMINER